Claims

1. A transformed microorganism having acquired high-expression ability to produce D-aminoacylase in a zinc ion-containing culture medium, prepared by inserting into a host microorganism with zinc tolerance a D-aminoacylase-producing gene the expression of a gene product of which is enhanced in the presence of zinc ion.

2. The transformed microorganism according to claim 1, wherein the D-aminoacylase-producing gene has a nucleotide sequence of SEQ ID NO:1 in the sequence listing or a nucleotide sequence hybridizing to the nucleotide sequence of SEQ ID NO: 1 in the sequence listing under stringent conditions and effectively encoding D-aminoacylase.

3. A process for producing D-aminoacylase, comprising culturing in a culture medium containing zinc ion a transformed microorganism prepared by inserting into a host microorganism with zinc tolerance a D-aminoacylase-producing gene the expression of the gene product of which is enhanced in the presence of zinc ion, and obtaining D-aminoacylase from the culture.

4. The process for producing D-aminoacylase according to claim 3, wherein the concentration of zinc ion contained in the culture medium is controlled to 0.1 to 10 mM.